Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Effects of Communications Towers on Migratory Birds	)	WT Docket No. 03-187
	)	
	)	

To: The Commission

COMMENTS OF THE LAND MOBILE COMMUNICATIONS COUNCIL

The Land Mobile Communications Council (LMCC), pursuant to Section 1.415 of the Commission's Rules, 47 C.F.R. § 1.1415, hereby respectfully submits its Comments in the above-captioned proceeding.[1]

I. INTRODUCTION

LMCC is a non-profit association of organizations representing virtually all users of land mobile radio systems, providers of land mobile services, and manufacturers of land mobile radio equipment. LMCC acts with the consensus, and on behalf, of the vast majority of public safety, business, industrial, transportation and private commercial radio users, as well as a diversity of land mobile service providers and equipment manufacturers. Membership includes the following organizations:

[1] In the Matter of Communications Towers on Migratory Birds, Notice of Proposed Rulemaking ("NPRM"), WT Docket No. 03-187, FCC 06-164, adopted November 3, 2006.

- American Association of State Highway and Transportation Officials (AASHTO)
- American Automobile Association (AAA)
- American Petroleum Institute (API)
- Association of American Railroads (AAR)
- Association of Fish and Wildlife Agencies (AFWA)
- Association of Public-Safety Communications Officials-International, Inc. (APCO)
- Aviation Spectrum Resources, Inc. (ASRI)
- Central Station Alarm Association (CSAA)
- Enterprise Wireless Alliance (EWA)
- Forest Industries Telecommunications (FIT)
- Forestry-Conservation Communications Association (FCCA)
- Intelligent Transportation Society of America, Inc. (ITSA)
- International Association of Fire Chiefs (IAFC)
- International Municipal Signal Association (IMSA)
- MRFAC, Inc. (MRFAC)
- National Association of State Foresters (NASF)
- PCIA – The Wireless Infrastructure Association (PCIA)
- Telecommunications Industry Association (TIA)
- Utilities Telecom Council (UTC)

It is the LMCC's position that there is insufficient information linking migratory bird deaths to communications towers for the Commission to impose new regulations that could, in effect, prohibit or significantly impair the deployment of critical wireless communications infrastructure throughout the country. A great number of land mobile systems are used in direct support of the safety of life and property, whether operated by businesses, critical infrastructure, or public safety entities. Such systems are vital to human life, even if there is some slight impact on migratory birds.

The LMCC generally supports the preservation of migratory birds, but not to the point of compromising critical communications systems or endangering air

navigation. Any efforts, if proven to be necessary and warranted, should focus on new towers and not on modifications to existing towers.

II. BACKGROUND

On November 3, 2006, the Commission adopted the referenced NPRM seeking comment on a number of issues relating to the effects of communications towers on migratory birds. Specifically, the Commission asked 1) about its legal authority to promulgate rules to minimize the impact of towers on migratory birds; 2) whether sufficient scientific data is available to support action; and 3) what measures might be taken to mitigate the effects of towers. As a tentative conclusion, the Commission suggested that use of medium-intensity white strobe lights appears to be helpful.

III. BASIS FOR ACTION

The LMCC takes no position as to the Commission's legal authority to impose new regulations relating to protection of migratory birds. However, the LMCC questions whether any action should be taken. The evidence that towers pose a significant hazard to the population of migratory birds is weak, at best, and appears to be highly speculative.

The NPRM states that the Department of the Interior's United States Fish and Wildlife Service ("FWS") estimates that the population of migratory birds in the United States varies between ten and twenty billion and that birds killed each year could range from four to fifty million. The NPRM further states that, in response to the FWS assertion, NAB and CTIA noted that only 0.05 per cent of the population of birds is potentially affected.[2] Thus, the number of

[2] NPRM at paragraphs 6 and 15.

potentially affected birds is very small in relation to the entire population of migratory birds; consequently, there is no significant environmental impact.

One cannot simply conclude that if bird strikes occur, towers are inherently detrimental to the environment and should be heavily restricted. The loss of a single human life due to the inability to construct adequate communications systems cannot be compared in any rational way against the loss of a bird's life. Towers are critical to providing wide-area communications capabilities for land mobile, common carrier, and broadcast communications. The events of 9/11 and Hurricane Katrina, alone, point out the critical need for communications and the need for ways to get information to the public in times of disaster and recovery.

The Commission should exercise extreme caution in moving forward with any new regulations that would minimize the effectiveness of wireless communications systems in general. Any Commission actions taken should not relate to tower height, construction, or location. Each of these factors will affect system performance, as tower height and location are at least partially directed by propagation characteristics of various frequency bands. The LMCC concurs with recommendations like encouraging collocation on existing towers, where possible, as a good policy, but collocation should not be mandated.

If the Commission decides to move forward with new regulations, the LMCC respectfully requests that it carefully analyze the effects of those regulations on new and existing communications systems.

IV. SUFFICIENCY OF DATA

The record is woefully lacking in evidence to support radical Commission action. With the range of numbers presented by FWS, it appears that the agency has no real idea of the correct numbers. Although the LMCC has no scientifically valid data to present, members of the organizations who belong to the LMCC are responsible for thousands of towers across the country. No member organization is aware of any widespread issue of bird collisions.

As to mitigation actions, if it is substantiated that the greatest bird mortality tends to occur on nights with low visibility conditions, especially fog, low cloud ceiling, or other overcast conditions, only the most minimal action should be considered and then only for new towers.[3] For example, use of lighting other than continuously burning red obstruction lights may be an option that is already available to both the FCC and FAA with no rule changes.[4] However the record to support any new action is quite lacking in both the scope of the issue or the appropriate measures to be taken.

V. MITIGATION OPTIONS

The Commission requests comment on a number of options that might be employed to mitigate bird collisions with towers. The NPRM first considers lighting requirements. In analyzing such changes, however, the views of the FAA and local jurisdictions must be taken into account. Changing from

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[3] NPRM at paragraph 23.

[4] *See generally,* conclusions from the Michigan Public Safety Communications System tower study at paragraph 31 of the NPRM.

continuously burning red lights to flashing strobes may meet with objections, as a tower may be more obvious and thus more objectionable to a community. The LMCC submits that the current rules and regulations provide sufficient remedies, should any actions be deemed necessary. The FAA's staff policy guidance already favors medium intensity strobe lighting over continuously burning red lights for new towers, with no changes in current regulations.

Retrofitting old towers is another matter. Changing from a continuously burning incandescent bulb to a strobe light is not a simple matter of installing a new bulb. Strobe lights require electronic circuitry to generate high-voltage pulses to fire the bulb. Adding such circuitry to side obstruction lights would likely require a complete replacement of the arm holding the light, as well as the light socket and fixture itself. Such a replacement would not be a trivial task, would be costly, and might affect the physical integrity of the tower. The Commission should do no more than recommend lighting changes on existing towers. Retrofits and upgrades to strobe lights should not be required.

The second suggestion in the NPRM relates to guy wires. The decision to use guy wires, or not, may include consideration of cost, soil conditions, required wind loading capabilities of the tower, expected icing loads, available footprint area, and a variety of other engineering factors. The LMCC also agrees with the Avatar report that use of bird flight diverting devices on guy wires is not a good idea. They can increase wind stress levels, take on heavy ice loads, and lead to vibration and/or harmonic motion of a guy wire that can bring down the tower.

Guy wires are a necessary option in the design of towers and should not be eliminated for new tower construction Neither should owners of existing towers be required to replace guyed towers with self-supporting towers.

The third suggestion is to limit tower height to 200 feet or less. This is perhaps the worst idea in the NPRM. Tower height directly relates to service area and the efficient use of spectrum. For VHF, UHF, and microwave systems, the distance that can be covered by a site depends on the line-of-sight distance to the horizon (with the radio horizon typically 4/3 that of the visual horizon). The higher the tower, the greater the area that can be covered. This is just like being able to see farther from the top of a mountain than from a valley. The only way to compensate for lack of antenna height to achieve coverage over a given area is to add more sites that use lower towers. Not only is that option more costly just because of the number of towers that must be constructed, such systems require sophisticated switching equipment to link sites together. Multi-site, switched systems are out of the question for a majority of public safety organizations, critical infrastructure entities, and business licensees due to cost and lack of site availability for multiple towers. Taller towers efficiently provide wide-area coverage from a single base station. Restricting towers to 200 feet or less could literally kill the wireless communications capabilities in this country. This option must be taken off the table.

The fourth suggestion concerns tower location. Towers are placed where they are for two reasons. Either the tower must be at the desired location to

secure needed radio coverage, or the tower is at the only available location. In either case, if the tower was not needed for wireless communications, it would not be built. Restricting towers in fly zones would result in a lack of coverage to some areas. Whether that coverage is designed to get critical information to the public or to get help for a first responder, the communications need must take precedence. Tower location should not be restricted.

The fifth suggestion is for collocation. The LMCC supports encouraging collocation. Adopting policies to promote collocation would be a positive step for a number of reasons beyond the bird issue. In fact, Section 1.1306 of the Rules already encourages collocation. But there are instances in which collocation is not possible. For example, a tower may be loaded to its maximum capacity already. Intermodulation may be an issue. Collocation should be encouraged, but it should not be mandated.

VI. SECTION 1.1307

The NPRM asks whether Section 1.1307 should be amended to require an Environmental Assessment (EA) for towers. The LMCC opposes such a requirement. With little evidence that there is a problem and no guidelines on how one would even perform the EA, it makes no sense to add this regulatory burden. The Avatar Report found that there is not an unambiguous relationship between avian collisions with communications towers and population decline of migratory birds.[5] Producing an EA is a difficult and costly task and the

[5] NPRM at paragraph 62.

assessment is potentially subject to unwarranted petitions to deny by those who simply do not want the tower to be built. Requiring an EA for migratory bird collisions would add a burden that is unwarranted and unsupported by the record.

VII. CONCLUSION

The LMCC objects to adoption of procedures to mitigate migratory bird strikes with communications towers that may affect the communications capabilities of the tower or require retrofitting of existing towers. The Commission must not restrict tower height, tower location, or use of guy wires. These are all variables needed to engineer communications systems that match user needs. Neither should the Commission require Environmental Assessments relating to migratory birds.

There is inadequate evidence to define the true scope of the problem and rules should not be promulgated based on hearsay and emotion. Even worse would be to adopt rules that could have an adverse impact on human life and property. Surely, Congress did not intend such an outcome when it enacted the environmental and migratory bird protection laws.

Respectfully submitted,

/s/ Ralph A. Haller

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